



Abstract of the Disclosure

A hoop support device for insertion into flexible tubes or other body cavities designed to hold open these areas due to the hoop strength of the device while maintaining flexibility to bend with the area within which it is placed. The device, consisting of one or more hoops of coiled wire of any desirable material, either metallic or non metallic, is preferably non magnetic. The hoop or series of hoops is preformed to match the structure within which it is to be placed by utilizing a length of coiled material and forming it over a mandrel of desired shape and then instilling a memory in the resulting shape by heat treatment or other suitable means such that the formed shape will be reformed after placement into the desired configuration. For placement, the formed shape may be reformed into a linear coil configuration by means of inserting the linear coil into a tube or onto a rod. The linear coil is then inserted into the area to be supported and the end of the coil positioned at the desired location such that upon removal of the rod or ejection from the tube, the pre-formed secondary shape will reform or re-establish itself within the area to be supported. The invention is suitable for medical applications, particularly vascular applications, but may be utilized for almost any support purpose on a micro or macro scale.

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